

Remarks

The various parts of the Office Action (and other matters, if any) are discussed below under appropriate headings.

Claim Rejections - 35 USC 102

Ichinose et al

The Examiner is alleging that the subject-matter of claims 75 to 79, 82 to 84, 87, 88, 99 to 105 and 108 is anticipated by Ichinose et al. This is not the case.

The independent claims (claims 75 and 100) each require inter alia the coating of a substrate surface with a **non-hydrolysed** precursor solution.

In Ichinose et al, and in contrast to claims 75 and 100, the metal alkoxide solutions will be necessarily partially hydrolysed; with full hydrolysis being achieved by immersion in water. The process of Ichinose et al is discussed in the present application [page 2, first full paragraph].

The present inventors have identified that, through the method of claims 75 and 100, which utilizes a non-hydrolysed precursor solution, improved conformal metal oxide coatings can be achieved, particularly on reticulated and nanocrystalline films.

Specifically, the present inventors have recognized that the preparation of the precursor solution under strictly-controlled water presence avoids partial hydrolysis, and achieves a solution which is insensitive to the atmosphere [page 11, last full paragraph and paragraph bridging pages 11 and 12].

The non-hydrolysed precursor solution of claims 75 and 100 is in marked contrast to that of Ichinose et al, where the precursor solution is disclosed as being susceptible to environmental hydrolysis [page 832, first column, final paragraph, lines 6 and 7].

In summary, it is submitted that the subject-matter of claims 75 and 100 is patentably distinguished over the disclosure of Ichinose et al.

As regards claims 76 to 79, 82 to 84, 87, 88, 99, 101 to 105 and 108, it is submitted that these claims are themselves allowable, in being dependent upon allowable independent claims (claims 75 and 100).

Palomares et al

The Examiner is alleging that the subject-matter of claims 75, 85, 88 to 91, 93 to 98 and 106 is anticipated by Palomares et al. This is not the case.

The independent claim (claim 75) requires inter alia the coating of a substrate surface with a non-hydrolysed precursor solution, and hydrolysing the precursor solution coated on the substrate surface.

Palomares et al fails to disclose such a method, and it appears that the Examiner has perhaps mis-interpreted the disclosure of Palomares et al (which it will be noted has common inventors to the present application).

In Palomares et al, the Examiner has identified the disclosure that "The film was exposed to water vapour..." as the hydrolysing step of claim 75. This is not the case. In claim 75, the hydrolysing step is required to be performed on the substrate surface coated with precursor solution.

In contrast, in Palomares et al, the coating solution has not been applied to the film when the film is exposed to water vapour. Palomares et al expressly discloses that "**After this**, the film was dipped in the coating solution..." (emphasis added), and so the water vapour exposure step is manifestly not a hydrolysing step.

In summary, it is submitted that the subject-matter of claim 75 is patentably distinguished over the disclosure of Palomares et al.

As regards claims 85, 88 to 91, 93 to 98 and 106, it is submitted that these claims are themselves allowable, at least for the reason they are dependent upon allowable independent claims (claims 75 and 100).

In relation to claim 106, it is noted that this claim, which is a dependent claim, is considered unpatentable over Palomares et al, but the related independent claim (claim 100) has not received any objection.

Claim Rejections - 35 USC 103

Ichinose et al and Blohowiak et al

The Examiner is alleging that the subject-matter of claim 80 is unpatentable over the disclosure of Ichinose et al in view of Blohowiak et al.

This is not the case. Claim 80 is itself allowable, in that it depends upon an allowable independent claim (claim 75) and the deficiencies of the primary reference are not cured by the secondary reference.

Ichinose et al and Itsuki et al

The Examiner is alleging that the subject-matter of claim 81 is unpatentable over the disclosure of Ichinose et al in view of Itsuki et al.

This is not the case. Claim 81 is itself allowable, in that it depends upon an allowable independent claim (claim 75) and the deficiencies of the primary reference are not cured by the secondary reference.

Palomares et al and Ichinose et al

The Examiner is alleging that the subject-matter of claims 86 and 107 is unpatentable over the disclosure of Palomares et al in view of Ichinose et al.

This is not the case. Claims 86 and 107 are themselves allowable, in being dependent upon allowable independent claims (claims 75 and 100) and the deficiencies of the primary reference are not cured by the secondary reference.

Palomares et al and Sommeling et al

The Examiner is alleging that the subject-matter of claims 92 to 94 is unpatentable over the disclosure of Palomares et al in view of Sommeling et al.

This is not the case. Claims 92 to 94 are themselves allowable, in being dependent upon an allowable independent claim (claim 75) and the deficiencies of the primary reference are not cured by the secondary reference.

In relation to claims 93 and 94, the Examiner has asserted that claims 93 and 94 are unpatentable over the disclosure of Palomares et al in view of Sommeling et al. However, the Examiner has not provided any substantiation to support the objection to claims 93 and 94. If the Examiner wishes to maintain the objection to claims 93 and 94, the Examiner is requested to substantiate this objection.

The absence in this reply of any comments on the other contentions set forth in the Office Action should not be construed to be an acquiescence therein. Rather, no comment is needed since the rejections should be withdrawn for at least the foregoing reasons.

Conclusion

In view of the foregoing, request is made for timely issuance of a notice of allowance.

Respectfully submitted,
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